

FACTORS INFLUENCING THE ADOPTION OF MHEALTH IN ORAL HEALTH CARE AMONG OLDER PEOPLE

Halima Sadia Hakim

Department of Family Oral Health, Faculty of Dentistry
Universiti Kebangsaan Malaysia, Jalan Raja Muda Abdul Aziz, 50300, Kuala Lumpur, Malaysia
Email: halimasadihakim@gmail.com, Tel: +601131385823

Tanti Irawati Rosli

Department of Family Oral Health, Faculty of Dentistry
Universiti Kebangsaan Malaysia, Jalan Raja Muda Abdul Aziz, 50300, Kuala Lumpur, Malaysia
Email: tantiir@ukm.edu.my, Tel: +603-92897121

Haslina Rani

Department of Family Oral Health, Faculty of Dentistry
Universiti Kebangsaan Malaysia, Jalan Raja Muda Abdul Aziz, 50300, Kuala Lumpur, Malaysia
Email: hr@ukm.edu.my, Tel: +60199137933

Atika Ashar

Department of Craniofacial Diagnostic and Bioscience, Faculty of Dentistry
Universiti Kebangsaan Malaysia, Jalan Raja Muda Abdul Aziz, 50300, Kuala Lumpur, Malaysia.
Email: atika.ashar@ukm.edu.my, Tel: +603-92897773

ABSTRACT

The adoption of mobile health (mHealth) technologies, which utilize mobile devices (smart phone, tablet, laptop or smart watch) for healthcare delivery and education, holds significant potential for enhancing public health practices, particularly in dentistry. Despite its recognized benefits, the uptake of mHealth among older adults remains limited, especially in the context of oral healthcare. This study aims to assess the factors influencing older adults' intention to adopt mHealth for oral healthcare services by employing the Unified Theory of Acceptance and Use of Technology (UTAUT) model.

A total of 236 older individuals aged 55 years and above from nine elderly activity centres in Kuala Lumpur and Selangor participated in this study. Data were gathered through structured, face-to-face questionnaire survey interviews. The questionnaire comprised four sections namely questions on the factors influencing mHealth use in oral healthcare, mobile literacy, mobile self-efficacy and trust. The data were analysed using IBM SPSS version 30 software. The results indicated significant positive association between behavioral intention and predictors: effort expectancy, social influence, and facilitating conditions whereas performance expectancy ($p > 0.05$) was non-significant on behavioral intention. Multiple linear regression analysis revealed that these factors explained 41.3% of the variance in behavioral intention towards mHealth adoption ($F = 39.009$, $p < 0.001$). The findings suggest that social influence had the strongest impact on behavioural intention, increasing the likelihood of mHealth adoption by approximately 3.6 times ($OR = 3.59$, 95% $CI = 1.79, 7.18$).

The study suggests that social influence plays an important role in the adoption of mHealth technologies for oral health care among older people. The findings may provide insights for healthcare providers in improving the oral health of older adults.

Keywords: Mobile Health, Oral Health Care, UTAUT, Older People.